

Raw Data

Raw flow cytometry data for each of the studied promoters. Below are mean GFP fluorescence values and standard deviations given by Kaluza analysis software. Columns and rows are described below as either estradiol or aTc values.

If you have any questions or comments, contact our team at igem@uottawa.ca.

pTre(4)Gx

Arithmetic Mean

0.4	0.39	0.39	0.43	0.42	0.42	0.37	0.36	0.37	0.46	0.38	0.39
2.44	3.28	1.99	2.3	2.49	2.41	2.21	2.49	2.66	2.49	2	1.89
6.12	5.77	4.85	5.21	3.6	4.54	4.4	3.91	4.92	5.26	3.77	4.25
10.01	9.74	5.57	8.59	7.3	6.94	6.95	7.47	8.46	8.62	5.92	8.7
16.73	16.2	13.26	11.44	12.88	11.02	11.83	12.75	13.84	14.01	11.26	11.1
18.68	16.84	15.13	15.26	15.74	14.56	13.59	15.76	16	15.36	12.95	14.68
23.23	22.09	21.43	20.68	18.04	17.67	19.36	17.83	18.96	18.55	15.89	19.19
25.7	25.15	21.44	22.97	23.98	21.24	22.71	20.54	20.87	17.5	14.39	20.21

estradiol (nM): 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000

atc (ng/mL): 0, 50, 100, 200, 300, 500, 750, 1000

Standard deviations

0.26	0.27	0.24	0.28	0.28	0.52	0.33	0.41	0.24	1.19	0.21	0.25
2.57	3.19	2.01	2.4	2.5	2.55	2.39	2.54	2.67	2.5	2.02	1.96
5.33	4.97	4.37	4.79	3.45	4.17	4.25	3.93	4.44	5.02	3.68	4.07
7.95	7.97	4.98	7.07	6.53	6.42	6.3	6.55	7.33	7.45	5.62	7.63
11.98	11.34	9.72	8.74	9.39	8.48	9.42	9.77	9.96	10.38	8.79	8.79
12.57	10.85	10.52	10.32	11.01	10.57	9.52	11.97	11.25	10.91	10.04	10.6
14.38	12.98	13.17	12.83	12.47	11.24	12.61	11.99	11.64	11.34	10.96	13.11
14.71	14.73	13.41	14.61	15.41	13.46	15.48	14.05	13.32	12.45	10.78	13.61

pTre(4) Arithmetic Mean

0.47	0.48	0.51	0.49	0.51	0.54	0.51	0.5	0.49	0.47	0.5	0.5
2.48	2.42	2.22	4.13	3.81	1.45	2.81	2.59	2.28	1.83	1.36	1.69
7.71	10.27	6.88	7.18	9.99	7.09	7.38	8.98	7.4	5.91	5.19	8.97
18.15	18.68	20.04	15.31	15.94	19.04	16.44	18.64	18.82	8.81	12.68	17
18.9	23.62	28.26	15.2	28.65	27.31	26.17	26.53	27.84	14.81	19.53	22.49
31.41	32.64	42.1	24.52	32.78	34.06	33.31	34.97	34.51	19.81	27.88	30.99
28.32	37.4	41.78	29.57	35.09	40.8	38.82	41.72	38.94	23.41	29.75	44.04
42.9	50.45	50.81	38.05	50.99	46.21	48.23	42.23	39.94	30.55	42.27	41.86

estradiol (nM) 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000
aTc (ng/mL) 0, 50, 100, 200, 300, 500, 750, 1000

Standard deviations

0.44	0.5	0.43	0.42	0.43	0.59	0.47	0.4	0.39	0.37	0.46	0.46
2.91	2.84	2.62	4.47	4.25	1.74	3.38	3.02	2.68	2.28	1.73	2.09
7.67	9.59	7.41	7.25	9.69	7.42	7.4	8.68	7.52	6.43	5.47	8.87
15.9	16.11	16.84	13.84	13.96	16.83	14.64	16.01	16.06	9.03	11.71	15.33
16.28	19.39	22.56	14	22.56	21.79	21.4	21.92	22.06	13.74	17.24	19.57
24.74	25.62	31.52	20.41	26.22	26.69	26.04	26.46	26.87	17.5	22.75	24.43
23.27	28.32	30	24.01	26.47	28.81	28.67	29.77	28.36	20.1	23.53	32.24
31.51	35.77	35.81	29.28	35.13	32.88	33.63	33.12	30.92	22.08	31.6	29.8

pGal Arithmetic mean

0.4	0.42	0.41	0.44	0.42	0.45	0.43	0.48	0.66	0.64	0.99	1.28
10.1	11.85	10.64	11.25	10.44	10.18	12.14	10.97	13.54	15.3	15.53	18.94
19.07	18.74	19.43	19.43	18.06	19.96	18.77	19.31	20.6	23.72	24.24	23.54
25.08	18.91	24.11	28.38	25.27	26.56	26.01	28.13	28.31	26.89	32.05	32.4
28.61	29.15	27.2	28.29	29.81	31.14	31.59	33.7	33.1	33.59	31.3	32.2
35.38	33.18	33.03	33.91	32.83	34.12	34.66	34.89	34.9	38.43	41.11	39.84
37.47	36.86	34.79	36.27	36.15	37.81	35.87	38.77	39.8	40.99	41.55	43.33
38.7	37.76	37.9	36.77	33.33	37.46	35.7	34.91	37.35	39.61	40.91	40.88

estradiol (nM): 0, 50, 100, 200, 300, 500, 750, 1000
aTc (ng/mL): 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000

Standard deviations

0.21	0.23	0.23	1.27	0.26	0.36	0.27	0.53	1.31	0.43	0.7	0.9
10.28	11.71	10.77	11.31	10.64	10.35	12.2	11.32	13.63	15.33	14.88	18.05
17.31	16.72	17.39	17.59	16.6	18.19	17.14	17.53	18.86	21.37	21.45	22.65
20.89	16.33	21.01	24.15	21.39	22.71	22.02	23.88	24.16	21.31	27.15	27.55
24.82	24	22.7	23.16	24.81	26.47	25.75	27.87	27.47	29.26	26.95	26.29
28.23	26.07	25.37	27.37	25.75	27.72	27.74	28.15	27.56	31.08	33.08	33.34
29.31	28.76	26.46	28.61	28.78	30.32	28.12	30.19	31.6	32.77	32.81	34.98
30.18	29	29.33	29.43	26.48	30	26.2	27.5	28.66	29.36	33.53	31.98

pGal(4)Tx (pMRP7 driving rtTA and GEV)

Arithmetic mean

0.43	0.38	0.38	0.4	0.33	0.47	0.53	0.48	0.55	0.71	0.81	1.17
8.17	7.3	8.03	7.51	7.03	8.25	7.89	8.12	6.87	8.7	9.88	10.11
16.48	15.68	14.49	15.34	14.14	14	14.2	12.61	13.57	14.19	14.21	17.22
21.63	22.07	22.78	22.58	21.93	20.65	21.87	20.78	21.3	18.99	19.75	25.08
27.37	26.24	22.78	22.68	24.26	23.99	21.81	23.26	23.5	23.16	22.74	28.14
29.75	26.47	28.57	26.59	28.21	30.2	27.18	26.83	28.82	25.72	26.11	30.07
34.05	28.76	27.14	32.54	31.64	31.57	26.34	31.38	28.48	28.2	30.54	29.71
34.05	30.77	31.64	32.46	30.04	30.16	29.75	30.5	30.69	31.65	30.99	32.58

estradiol (nM): 0, 50, 100, 200, 300, 500, 750, 1000

atc (ng/mL): 0, 25, 50 , 100, 150, 200, 250, 300, 400, 500, 750, 1000

Standard deviation

0.21	0.18	0.17	0.19	0.15	0.33	0.41	0.31	0.64	0.44	0.48	0.76
7.76	6.97	7.71	7.3	6.92	7.8	7.56	7.9	6.61	8.03	8.83	9.1
13.71	12.91	11.81	13.04	12.37	12.51	12.16	10.88	11.35	11.4	11.39	13.9
17.87	17.36	17.42	18.37	17.27	16.89	17.56	16.22	17.06	15.09	15.43	19.16
20.62	20.1	18.41	17.58	19.38	18.87	16.72	17.57	18.29	17.72	17.42	20.86
21.82	20.56	22.79	20.97	21.55	22.83	20.27	20.37	21.53	19.41	18.4	22.97
24.65	21.93	19.76	24.42	22.32	23.35	19.37	23.39	21.37	20.95	22.55	22.73
23.13	22.42	22.53	22.97	20.06	19.84	21.06	20.83	20.47	22.1	22.25	24.01

pGal(4)Tx (pADH1 driving rtta and pMRP7 driving GEV)

Arithmetic mean											
0.42	0.59	0.63	1.13	0.46	1.35	1.34	1.69	1.75	1.9	2.2	2.85
1.91	5.51	5.32	2.43	4.84	2.26	2.26	2.42	2.43	2.68	3.19	3.87
17.06	9.82	6.93	5.31	12.25	2.86	4.43	2.4	3	3	3.31	3.91
21.99	6.27	4.32	3.63	16.59	3.16	3.02	2.86	2.92	3.46	3.47	3.88
22.19	16.37	16.2	4.41	21.25	3.14	3.4	3.35	3.27	3.42	3.3	3.86
25.79	20.06	17.59	5.63	24.56	3.91	3.78	3.56	3.37	3.61	3.47	3.98
23.49	17.77	19.33	5.7	25.77	3.93	3.69	3.4	3.71	3.54	3.2	4.15
29.89	20.85	20.14	13.63	22.42	6.58	7.94	4.05	4.06	3.17	3.74	4.54

estradiol (nM): 0, 50, 100, 200, 300, 500, 750, 1000
atc (ng/mL): 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000

Standard deviation											
0.25	0.34	0.43	0.64	0.31	0.79	0.77	1.02	1.02	1.11	1.18	1.74
2.03	4.91	4.57	1.69	4.8	1.49	1.46	1.57	1.57	1.68	2.11	2.64
13.16	7.98	5.88	4.19	9.94	2.02	3.19	1.65	2.03	2.03	2.14	2.6
16.73	4.67	3.62	2.45	12.83	2.16	1.98	1.87	1.87	2.37	2.35	2.61
16.53	12.1	11.96	3.11	15.8	2.38	2.27	2.26	2.18	2.29	1.9	2.57
19.37	14.36	12.6	3.87	18.16	2.63	2.51	2.35	2.24	2.4	2.29	2.61
16.64	14.15	13.62	4.08	18.87	2.57	2.38	2.12	2.49	2.34	1.76	2.84
22.72	14.72	14.18	9.79	16.54	4.37	5.51	2.6	2.86	2.31	2.45	3.06

pTre(2)Gx (pMRP7 driving rtTA and GEV)

Arithmetic means											
0.43	0.37	0.42	0.4	0.42	0.43	0.4	0.42	0.41	0.5	0.45	0.44
0.65	0.87	0.66	0.67	1.4	0.77	0.73	0.67	1.25	1.04	1.27	1.32
1.57	2.95	2.24	1.5	2.05	1.86	1.97	1.6	1.99	1.95	1.79	1.99
4.12	4.85	4.19	3.51	4.1	3.99	3.19	4.06	3.11	3.31	2.5	3.18
5.04	8.53	5.57	5.38	5.39	4.91	4.67	4.58	5.08	4.33	5.11	5.53
9.12	8.81	7.86	7.45	7.24	6.4	6.47	6.38	6.3	6.55	7.11	6.8
13.98	10.96	9.71	10.51	11.85	10.73	10.02	8.9	8.78	9.84	8.09	9.88
17.2	15.95	13.52	13.19	12.86	13.42	12.35	11.79	9.37	11.49	10.16	11.11

estradiol (nM): 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000
aTc (ng/mL): 0, 50, 100, 200, 300, 500, 750, 1000

Standard deviation

0.29	0.21	0.26	0.61	0.24	0.27	0.23	0.59	0.24	0.34	0.28	0.27
0.77	1.06	0.75	0.74	1.85	1.27	0.84	0.83	1.49	1.24	1.51	1.61
1.97	3.33	2.64	1.74	2.41	2.18	2.41	1.81	2.23	2.28	2.02	2.28
4.95	5.45	4.59	3.75	4.53	4.28	3.46	4.36	3.43	3.63	2.65	3.28
5.38	8.11	5.58	5.22	5.33	4.86	4.68	4.59	5.62	4.62	5.45	5.49
8.81	8.01	7.35	7.23	6.76	6.41	6.35	5.98	6.52	6.36	6.84	6.73
13.35	9.06	8.79	9.85	11.39	10.44	9.67	8.27	8.2	9.37	7.42	9.59
15.4	14.79	12.05	11.87	11.75	11.48	11.3	11.15	8.76	10.69	9.83	10.69

Arithmetic mean

Ian41	0.7	20.04	33.88	51.6	57.1	58.26	66.79	65.87	75.93	70.39	73.47	61.2
YBA35	0.39	0.35	0.36	0.36	0.36	0.38	0.37	0.42	0.36	0.41	0.37	0.41

estradiol (nM): 0, 25, 50, 100, 150, 200, 250, 300, 400, 500, 750, 1000

Standard deviation

0.69	14.76	19.46	26.83	28.73	28.34	31.66	29.99	33.26	29.72	30.6	29.54
0.24	0.15	0.15	0.2	0.15	0.94	0.19	0.22	0.17	0.22	0.18	0.24

Data set 2:

pGAL(2)Tx

Arithmetic means

0.25	0.4	0.77	1.1	1.22	1.37
0.26	0.38	0.65	1.02	1.19	1.39
0.31	0.43	0.72	1.21	1.41	1.61
0.42	0.57	0.84	1.4	1.66	1.99
0.55	0.77	1.18	1.79	2.04	2.11
0.74	0.91	1.27	1.89	2.38	2.44

estradiol (horizontal) (nM): 0, 100, 250, 500, 800, 1000

aTC (vertical) (ng/mL): 0, 100, 250, 500, 800, 1000

Standard deviation

0.18	0.59	0.56	0.78	0.86	0.89
0.24	0.71	0.51	0.71	0.81	0.92
0.28	0.27	0.55	0.83	0.95	1.08
0.26	0.34	0.58	0.93	1.1	1.29
0.31	0.47	0.77	1.14	1.31	1.36
0.41	0.54	0.8	1.19	1.5	1.53

Control (pGal(4)Tx)

Arithmetic means

0.33	2.58	7.59	12.88	13.83	16.46
0.8	1.84	2.96	4.07	4.71	4.16
1.14	1.58	2.07	2.44	2.82	2.9
1.38	1.76	2.05	2.4	2.58	2.62
1.43	1.97	2.18	2.64	2.66	2.75
0.39	2.04	2.38	2.84	2.85	2.63

estradiol (horizontal) (nM): 0, 100, 250, 500, 800, 1000

aTC (vertical) (ng/mL): 0, 100, 250, 500, 800, 1000

Standard deviation

0.77	2.51	5.82	8.83	9.07	10.89
0.76	1.18	2.25	2.51	2.83	2.35
0.61	0.82	1.18	1.28	1.64	1.61
0.67	0.89	1.08	1.27	1.41	1.33
0.67	1.02	1.1	1.37	1.45	1.4
0.24	1.02	1.22	1.53	1.58	1.35

Data set 3:

pTre(2) (pADH1 driving rtTA)

Arithmetic mean

1.92	1.97	1.57	1.79
10.22	16.84	15.04	14.5
14.71	15.64	12.44	14.54
9.43	11.24	11.77	8.53

estradiol (horizontal) (nM): 0, 250, 500, 1000

aTc (vertical) (ng/mL): 0, 250, 500, 1000

Standard deviation

1.85	1.85	1.33	1.78
9.29	14.61	13.85	12.23
12.64	12.74	11.15	13.2
8.79	10.2	9.98	7.11

Positive control (Ilan41, activating promoter with aTc and estradiol)

Arithmetic means

0.48	34.04	42.24	28.44
23.91	95.76	96.26	93.94
27.59	99.99	105.39	106.94
55.51	108.2	200.47	127.24

estradiol (horizontal) (nM): 0, 250, 500, 1000

aTc (vertical) (ng/mL): 0, 250, 500, 1000

Standard deviations

0.4	28.44	28.55	22.44
30.51	166.01	143.26	114.71
31.44	141.9	139.64	164.98

YBA35 (negative control)

Arithmetic means

0.52	0.35	0.38	0.42
estradiol (horizontal) (nM): 0, 250, 500, 1000			
aTc (ng/ml): 1000			

Standrd deviations

0.47	0.15	0.21	0.39
66.11	136.42	200.47	160.1